ESM 480

FUTURES TRADING
OF
LIVE HOGS
(HEDGING)

by

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LIVE HOG FUTURES

Hedging is a protective procedure designed to minimize commodity marketing and processing losses that are due to adverse price fluctuations.

The term hedging, as it applies to any commodity which has the benefit of futures trading, means the taking of such action that will result in offsetting possible losses in transactions previously made or about to be entered upon. The futures can be used in one of two ways:

(1) the sale of one or more futures contracts to eliminate or lessen the possible decline in value of ownership of an approximately equal amount of the actual commodity due to a price decrease. This is called a "short" hedge and used by producers of livestock.

(2) the purchase of one or more futures contracts to eliminate or lessen loss from the possible advance in the value of the actual commodity due to a price increase not yet owned, and needed to fill porcessing or other commitments at set prices. This is a "long" hedge and used by slaughtering plants.

Futures trading in live hogs began on February 28, 1966, at Chicago Mercantile Exchange. Basically, the rules and regulations for trading in live hog futures contracts as published by the Chicago Mercantile Exchange are as follows:

- A trading unit is 30,000 pounds of USDA Grade No. 1, No. 2, No. 3, and No. 4 barrows and gilts.
- A par delivery unit is 30,000 pounds.
    (a) Average in weight range of 200 to 230 pounds.
    (b) At least 90 hogs in each delivery unit must fall within the 200 to 230 pound weight range.
    (c) Hogs under 190 pounds or over 240 pounds will not be deliverable.
    (d) Units having more than 90 No. 3's discounted 50¢/cwt. for the entire delivery unit.
    (e) Units shall not have more than 8 No. 4's and these shall be discounted $2.00/cwt.
- Minimum initial margin of $400 per contract (30,000 pounds).
- Non-member round turn (buying and selling) commission $35.00 per contract.

- Grading shall be done by USDA graders.
- Par delivery - Peoria approved yards.
- Omaha, E. St. Louis, Sioux City, St. Paul - deliveries 25¢ under Peoria and Kansas City 50¢ under Peoria.
- Trading shall terminate on the 20th calendar day of the contract month--deliveries shall commence on the first business day thereafter.
- Contracts to be delivered in December, February, April, June, July, August, and October.
- Maximum price change per day $1.50 per cwt. in either direction.

Additional information may be obtained by contacting a local brokerage firm which is represented on the Exchange.

Careful production cost calculations need to be made as you can lock in a loss as well as a profit in futures selling.

Advantages of Futures Trading (Hedging)

1. Assure producer a certain price for a given month.
2. Lock in a profit given production cost.
3. Should make credit more easy to obtain.
4. Tends to level out production and prices.

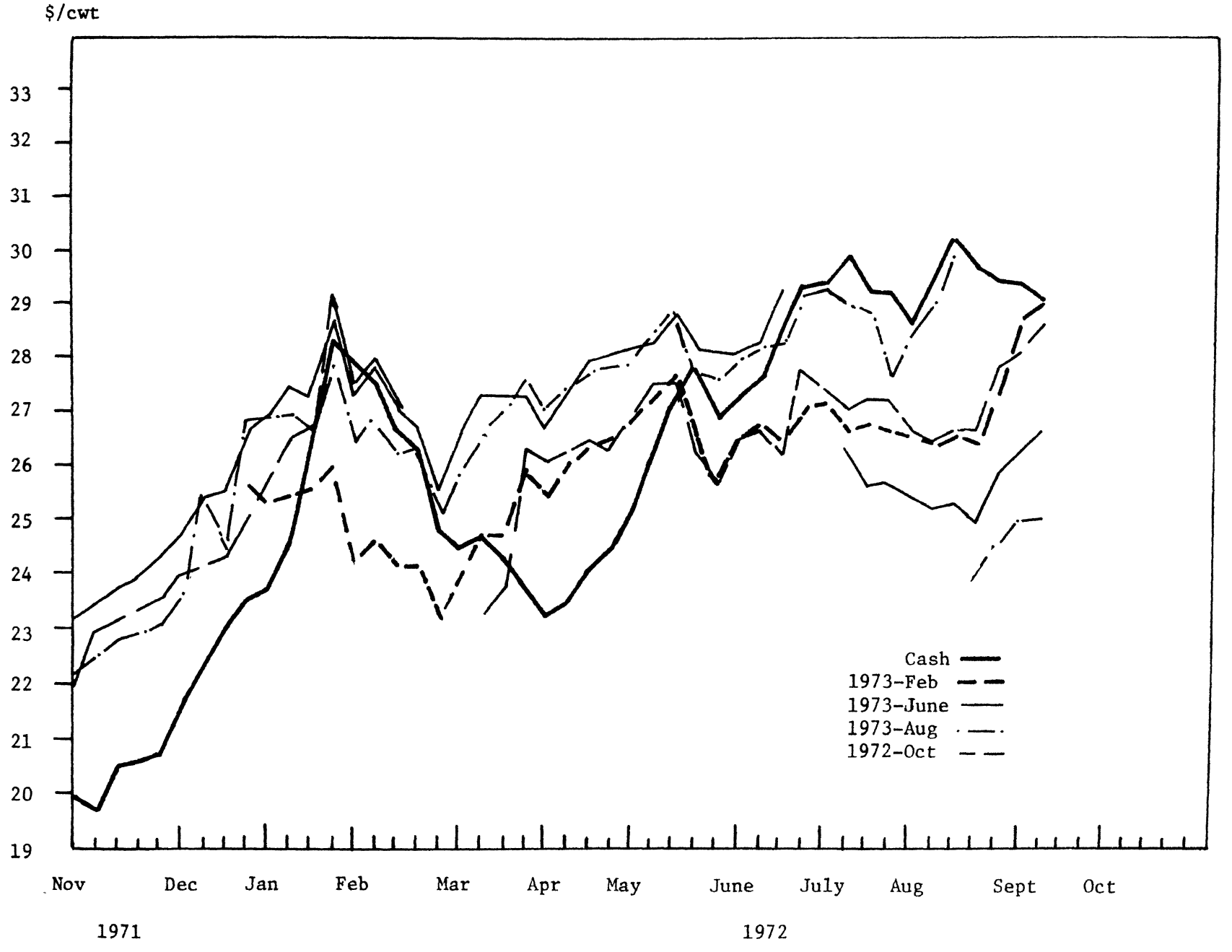
Disadvantages of Futures Trading (Hedging)

1. Will not assure the highest price.
2. May not give the greatest net profit.
3. Must pay service fee.

See examples on the following pages as to possible results of hedging.

LIVE HOG FUTURES BY WEEKS

Cash Price--Ohio (Mkt. News)



Fixing Sales Price Against A Price Change

	Price per cwt.	Return per animal	
		Cash Mkt.	Future Mkt.
June 30 buys 50 lb. feeders @	$50.00	$25.00	
Puts on 170 lb. gain	18.00	30.60	
Total cost of 220 lb. hog		55.60	
Break even selling price	25.27		
June 30 sells October futures for 220 lb. hog cwt. locally	26.50		$58.30
October 15 sells 220 lb. hogs	25.00	55.00	
October 15 buys back contract	25.00		55.00
Gain or loss per head		-.60	2.70
Gain or loss on 1 contract 136 hogs		-81.60	364.20
Less costs comm. $35.00 + 9.35 int.			-44.35
Net gain or loss on contract			$319.85
Net gain on feeding operation	($319.85	- 81.60) =	$238.25

The above table is an example of a feeder who knows his normal cost of production and locks in a profit at the time he buys feeder pigs (hedging). He does this by selling on the futures market at a price which is favorable. You will note he sells a contract the same day when he buys the pigs, he anticipates these pigs will reach market weight in October so he sells them on the October market.

His break even price is $25.27 per cwt. and he sells them at $26.50 thereby locking in a profit of $2.70 per head or $364.20 on 136 head or 1 contract. In this case the cost of selling on the futures market was $44.35. The price has dropped to $25.00 per cwt. He sells his hogs at a local market, relieves his delivery obligation to Peoria, Illinois before the 20th of the month by buying back a contract for $25.00 per cwt.

If he had not sold on the futures market he would have lost 60 cents per head or $81.60 on 136 hogs.

His net gain on the feeding operation $319.85 made on futures selling, less $81.60 he lost on the normal feeding operation, leaving a net profit of $238.25 on the 136 hogs.

	Price per cwt.	Return per animal	
		Cash Mkt.	Future Mkt.
June 30 buys 50 lb. feeders @	50.00	25.00	
Puts on 170 lb. gain	18.00	30.60	
Total cost of 220 lb. hog		55.60	
Break even selling price	25.27		
June 30 sells October futures for 220 lb. slaughter hogs	26.50		58.30
October 15 sells 220 lb. hogs	28.00	61.60	
October 15 buys back contract	28.00		61.60
Gain or loss per head		6.00	-3.30
Gain or loss on 30,000 lb. or 136 head		816.00	-448.80
Less costs comm. $35.00 + $9.35 int.			-44.35
Net gain or loss on contract			-493.15
Net gain on feeding operation	(816.00	- 493.15)	= $322.85

The table above is an example of a hedging operation where the final results are the opposite. You will note the first part of this table is the same as the previous table with the costs and break even selling price the same.

He again sells 1 contract of hogs weighing 220 lbs. on the October futures market at $26.50 per cwt. This transaction will bring him $58.30 per head and a gross profit of ¸2.70 or $364.20 per contract. However, in this situation the price for hogs increased and when the October marketing period came he could sell them locally for $28.00 per hundred which he did. To relieve him of the delivery obligation he bought a contract on the futures market for $28.00 thus offsetting any advantage of the price increase. As a result he lost a total of $493.15, including brokerage fee, interest charge on the margin, by hedging. But on his total feeding operation he did have locked in a net profit of $322.85. The final selling price of $816.00 less $493.15 loss on futures selling equals the $322.85 net profit.

It should be understood the previous examples are for illustrative purpose. Actual conditions will vary to some extent. The following page is for your use in working out a hedging problem using your own situation and data.

My Example of Fixing Sales Price Against A Price Change

	Price per unit	Return per animal	
		Cash Mkt.	Future Mkt.
Date _____ buys ___ lb. feeders @	$_____	$_____	
Puts on ____ lb. gain	_____	_____	
Total cost of ____ lb. hog		_____	
Break even selling price	_____		
Date _____ sells _____ futures for ____ lb. hog cwt. locally	_____		_____
Date _____ sells ____ lb. hogs	_____	_____	
Date _____ buys back contract	_____		_____
Gain or loss per head		_____	_____
Gain or loss on _____		_____	_____
Less costs _____			_____
Net gain or loss on contract			_____
Net gain on feeding operation			_____